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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,508	07/22/2003	Sang Won Chung	CHUN3059/EM	5802

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EXAMINER

CAO, PHUONG THAO

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,508	SANG CHUNG	
	Examiner	Art Unit	
	Phuong-Thao Cao	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/22/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Application filed on 07/22/2003.
2. Claims 1-18 are pending.
3. Foreign Priority was claimed and the certified foreign application Republic of Korea 2003-0004366 (01/22/2003) was received and considered.

Information Disclosure Statement

4. Document 2002-29657 (Korea) provided by Applicant in the Information Disclosure Statement was not considered because Applicant failed to submit the document and Examiner was unable to access to it.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah et al. (Publication No US 2002/0091763).

As to claim 1, Shah et al. teach:

“A method of controlling a user application program executed in a client computer” (see [0082]-[0085]), comprising the steps of:

“receiving a file readout request for a file from the user application program” (see [0202] wherein a request for code or data is equivalent to Applicant’s “a file readout request”; also see [0141]);

“determining whether the file is stored in the client computer” (see [0196] and [0197]);

“if it is determined that the file has been stored in the client computer, forwarding data of the file to the user application program” (see [0197]); and

“if it is determined that the file has not yet been stored in the client computer, receiving some of the data of the file from a predetermined server with the file stored therein and storing the some of the data in the client computer and forwarding the received data to the user application program, the predetermined server being connected to the client computer through a network” (see [0188], [0196], [0197] and [0202]).

As to claim 2, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“wherein the step of receiving some of the data is performed by using data offsets of the file and the size of some of the data to be received” (see [0188]).

As to claim 3, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“continuously executing the user application program in the state where only some of the data are received but all data of the file have not yet been received” (see [0186]).

As to claim 4, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“wherein the step of receiving the file readout request for the file from the user application program comprises the step of hooking the file readout request or mapping an original function for processing the file readout request to another function” (see [0091] and [0171]).

As to claim 5, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“wherein the step of receiving the data of the file from the predetermined server with the file stored therein and caching the received data in the client computer” (see [0186] and [0202]).

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“identifying a second client computer with the file stored therein” (see [0664], [0679], and [0694]-[0699] wherein “page” is equivalent to Applicant’s “file”); and

“receiving the file from the identified second client computer and transferring the received file to the user application program” (see [0679] and [0694]-[0699]).

As to claim 7, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Shah et al. teach:

“while the file readout request is not received from the user application program, receiving data expected to be required by the user application program from a second client computer with the data stored therein and storing the received data” (see [0142], [0154], [0210] and [0694] wherein the disclosure of prefetching and getting data using peer-caching mechanism is equivalent to Applicant’s claim language).

As to claim 8, this claim is rejected based on arguments given above for rejected claim 7 and is similarly rejected including the following:

Shah et al. teach:

“wherein determination on the data expected to be required by the user application program is made based on data that have been request by the user application program upon previous execution of the user application program” (see [0087] and [0210]).

As to claim 9, Shah et al. teach:

“A method of controlling a user application program executed in a client computer” (see [0084] and [0085]), comprising the steps of:

“receiving a file-writing request for a file from the user application program” (see [0187]);

“determining whether it is necessary to upload the file to a predetermined server that is connected to the client computer through a network” (see [0782] and [0083] wherein request to write is equivalent to Applicant’s “file-writing request” and the disclosure of examining the request and deciding whether to deny it or grant it is equivalent to determining whether it is necessary to upload the file to a predetermined server as illustrated in Applicant’s claim language; also see [0221]);

“if it is determined that it is necessary to upload the file to the server, uploading the file to the server” (see [0782]); and

“if it is determined that it is not necessary to upload the file to the server, writing the file in the client computer” (see [0218] and [0219] wherein configuration or initialization files is written on the client through a local copy-on-write file system).

As to claim 10, Shah et al. teach:

“A method of controlling a user application program” (see [0084] and [0085]), comprising the steps of:

“receiving a file readout request for a file from the user application program” (see [0187] and [0202] wherein request for reading file or request for code or data is equivalent to Applicant’s “file readout request”);

“checking the user application program and data associated therewith, which are stored in a client computer, in response of the file readout request” (see [0223] and [0224]);

“if it is confirmed from the check that the user application program and the data have been altered, notifying a predetermined server of the alteration, the predetermined server being connected to the client computer through a network” (see [0224] wherein the disclosure of retrieving a fresh copy of the page from the server implies the communication of the modification to the server as illustrated in Applicant’s claim language; also see [0295] for mechanism for monitoring file modification).

As to claim 11, this claim is rejected based on arguments given above for rejected claim 10 and is similarly rejected including the following:

Shah et al. teach:

“wherein the checking step is performed by using CRC check” (see [0224] wherein checking using checksums is equivalent to Applicant’s “CRC check”).

As to claim 12, Shah et al. teach:

“A method of controlling a user application program” (see [0084] and [0085]), comprising the steps of:

“receiving a file readout request for a file from the user application program” (see [0187] and [0202] wherein request for reading file or request for code or data is equivalent to Applicant’s “file readout request”);

“performing predetermined authentication while connecting with predetermined server at a predetermined time interval” (see [0241] and [0282]); and

“if authentication fails, causing the user application program not to be executed by ignoring the file readout request” (see [0261] and [0282]).

As to claim 13, this claim is rejected based on arguments given above for rejected claim 12 and is similarly rejected including the following:

Shah et al. teach:

“wherein fees for the use of the user application program are charged to a user on the basis of pay-per-minute billing” (see [0122] and [0123] wherein the disclosure of keeping billing information and information of which user has used which application for how long inherently includes the possibility to charge on the basis of pay-per-minute billing as illustrated in Applicant’s claim language; also see [0597]).

As to claim 14, Shah et al. teach:

“A method of controlling a user application program executed in a client computer” (see [0084] and [0085]), comprising the steps of:

“storing at least one of a plurality of data blocks in a data file, which is accessed by the user application program, as a priority file in a predetermined server” (see e.g., [0284] wherein the disclosure of managing main memory as cache of file blocks, keeping the most commonly accessed ones implies the priority in managing files and the files with this priority indication such as commonly accessed is equivalent to Applicant’s “priority file”; also see [0313] and [0314] wherein set of file blocks with particular user input must be stored in a file so the client can request minimum amount of data needed to respond to that particular user command; also see [0320]-[0324]);

“storing data offsets for the data blocks, size of the data blocks and priority file identifiers associated with the data blocks in an index storage means” (see [0320], [0324], and [0188] wherein SOFT (Size Offset File Table) is equivalent to Applicant’s “index storage means”);

“receiving a data readout request for an arbitrary data block in the data file from the user application program” (see [0202]);

“identifying a priority file corresponding to the arbitrary data block by referring to the index storage means” (see [0188] and [0324]); and

“receiving the identified priority file from the predetermined server and transferring the priority file to the user application program” (see [0324] wherein serving the proper file blocks to the client is equivalent to Applicant’s claim language).

As to claim 15, this claim is rejected based on arguments given above for rejected claim 14 and is similarly rejected including the following:

Shah et al. teach:

“identifying a second client computer with the priority file stored therein” (see [0664], [0679], and [0694]-[0699] wherein “page” is equivalent to Applicant’s “priority file”); and

“receiving the priority file from the identified second client computer and transferring the received file to the user application program” (see [0679] and [0694]-[0699]).

As to claim 16, this claim is rejected based on arguments given above for rejected claim 14 and is similarly rejected including the following:

Shah et al. teach:

“while the file readout request is not received from the user application program, receiving a priority file expected to be required by the user application program from a second client computer with the priority file stored therein and storing the received priority file” (see [0087], [0142], [0154], [0210], [0264] and [0694] wherein “page” is equivalent to Applicant’s “priority file” and the disclosure of prefetching and getting data using peer-caching mechanism is equivalent to Applicant’s claim language).

As to claim 17, this claim is rejected based on arguments given above for rejected claim 16 and is similarly rejected including the following:

Shah et al. teach:

“wherein determination on the data expected to be required by the user application program is made based on priority files that have been request by the user application program upon previous execution of the user application program” (see [0087] and [0210] wherein pages

along with information to identify the sequences of frequently accessed application pages is equivalent to Applicant's "priority file").

As to claim 18, the examiner chooses claim 1 as the parent claim. Shah et al. teach:
"A computer-readable recording medium on which a program performing a method according to claim 1 is recorded" (see [0082]-[0085]), comprising the steps of:

"receiving a file readout request for a file from the user application program" (see [0202] wherein a request for code or data is equivalent to Applicant's "a file readout request"; also see [0141]);

"determining whether the file is stored in the client computer" (see [0196] and [0197]);

"if it is determined that the file has been stored in the client computer, forwarding data of the file to the user application program" (see [0197]); and

"if it is determined that the file has not yet been stored in the client computer, receiving some of the data of the file from a predetermined server with the file stored therein and storing the some of the data in the client computer and forwarding the received data to the user application program, the predetermined server being connected to the client computer through a network" (see [0188], [0196], [0197] and [0202]).

7. The prior art made of record and not relied upon is considered to pertinent to Applicant's disclosure.

Bulson et al. (Publication No US 2003/0061280) teach systems and methods for enhancing streaming media in various scenarios such as live/on-demand events, Real/Windows Media platforms, and Netscape/Internet Explorer browsers.

Breiter et al. (Publication No US 2002/0147827) teach method, system and computer program product for streaming of data from server to client when data is partially available on the server using media cache.

Harrow et al. (Publication No US 2003/0074403) teach method and apparatus for peer-to-peer services.

Fish (Publication No US 2003/0088591) teaches data storage device with deterministic caching and retention capabilities to effect file level data transfers with a host device using priority settings.

Gonzalez et al. (Publication No US 2003/0028590) teach a method of file transfer between computer entities in a network using data streaming.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTC

February 13, 2006

Duke J. Wassum
Primary Examiner
Art Unit 2167